

SEQUENCE LISTING

<110> Degussa AG

5 <120> Corynebacterium glutamicum strain with enhanced
secretion activity

<130> 000091 BT

10 <140>
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<160> 4

15 <170> PatentIn Ver. 2.1

<210> 1

<211> 1960

<212> DNA

20 <213> Corynebacterium glutamicum

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<221> misc_feature

<222> (34)..(1944)

25 <223> secD

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5 <211> 1562

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<223> secF

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<213> Corynebacterium glutamicum

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<222> (1)..(637)

<223> secD

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 35 40 45
 5 Asp Leu Gln Gly Gly Thr Arg Val Thr Leu Val Pro Gln Gly Gln Asp
 50 55 60
 Pro Thr Gln Asp Gln Leu Asn Gln Ala Arg Thr Ile Leu Glu Asn Arg
 65 70 75 80
 10 Val Asn Gly Met Gly Val Ser Gly Ala Ser Val Val Ala Asp Gly Asn
 85 90 95
 Thr Leu Val Ile Thr Val Pro Gly Glu Asn Thr Ala Gln Ala Gln Ser
 100 105 110
 15 Leu Gly Gln Thr Ser Gln Leu Leu Phe Arg Pro Val Gly Gln Ala Gly
 115 120 125
 20 Met Pro Asp Met Thr Thr Leu Met Pro Glu Leu Glu Glu Met Ala Asn
 130 135 140
 Arg Trp Val Glu Tyr Gly Val Ile Thr Glu Glu Gln Ala Asn Ala Ser
 145 150 155 160
 25 Leu Glu Glu Met Asn Thr Ala Val Ala Ser Thr Thr Ala Val Glu Gly
 165 170 175
 30 Glu Glu Ala Thr Glu Pro Glu Pro Val Thr Val Ser Ala Thr Pro Met
 180 185 190
 Asp Glu Pro Ala Asn Ser Ile Glu Ala Thr Gln Arg Arg Gln Glu Ile
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 35 Thr Asp Met Leu Arg Thr Asp Arg Gln Ser Thr Asp Pro Thr Val Gln
 210 215 220
 Ile Ala Ala Ser Ser Leu Met Gln Cys Thr Thr Asp Glu Met Asp Pro
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 45 Ala Val Gly Gly Val Tyr Val Leu Asp Pro Ala Pro Leu Leu Asn Gly
 260 265 270
 Glu Thr Asp Glu Glu Asn Gly Ala Arg Leu Thr Gly Asn Glu Ile Asp
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 50 Thr Asn Arg Pro Ile Thr Gly Gly Phe Asn Ala Gln Ser Gly Gln Met
 290 295 300
 Glu Ile Ser Phe Ala Phe Lys Ser Gly Asp Gly Glu Glu Gly Ser Ala
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 55 Thr Trp Ser Ser Leu Thr Ser Gln Tyr Leu Gln Gln Gln Ile Ala Ile
 325 330 335

Thr Leu Asp Ser Gln Val Ile Ser Ala Pro Val Ile Gln Ser Ala Thr
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 5 Pro Val Gly Ser Ala Thr Ser Ile Thr Gly Asp Phe Thr Gln Thr Glu
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 10 Phe Ala Gly Glu Asn Gly Glu Arg Gly Gly Thr Thr Thr Thr Val Pro
 385 390 395 400
 Pro Ser Leu Gly Ala Ala Ser Leu Lys Ala Gly Leu Ile Ala Gly Ile
 405 410 415
 15 Val Gly Ile Ala Leu Val Ala Ile Phe Val Phe Ala Tyr Tyr Arg Val
 420 425 430
 Phe Gly Phe Val Ser Leu Phe Thr Leu Phe Ala Ala Gly Val Leu Val
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 Tyr Gly Leu Leu Val Leu Leu Gly Arg Trp Ile Gly Tyr Ser Leu Asp
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 Ser Phe Val Val Phe Tyr Glu Arg Ile Lys Asp Glu Ile Arg Glu Gly
 485 490 495
 30 Arg Ser Phe Arg Ser Ala Val Pro Arg Ala Trp Glu Ser Ala Lys Arg
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 Tyr Leu Leu Ala Val Gly Glu Val Lys Gly Phe Ala Phe Thr Leu Gly
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 545 550 555 560
 Leu Val Ile Leu Ala Ser Arg Asn Pro Phe Phe Ala Lys Ser Ser Val
 565 570 575
 45 Asn Gly Met Gly Arg Val Met Lys Leu Val Glu Glu Arg Arg Ala Asn
 580 585 590
 Gly Glu Leu Asp Glu Pro Glu Tyr Leu Lys Lys Ile His Ala Lys Asn
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Leu Leu Val Ile Ser Ile Leu Phe Ile Ala Ile Arg Gly Phe Ser Leu

50 55 60

25 Ser Ile Asp Phe Gln Gly Gly Thr Lys Met Ser Met Pro Ala Ser Asp
65 70 75 80

Tyr Ser Thr Glu Gln Val Glu Glu Thr Phe Thr Glu Ala Thr Gly Ile
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30 Thr Pro Glu Ile Val Gln Ile Val Gly Ser Gly Asp Ala Arg Thr Leu
100 105 110

Glu Ile Tyr Ser Glu Arg Leu Ser Asp Glu Asp Val Glu Lys Ala Arg
115 120 125

35 115 120 125
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40 Ser Pro Asp Ala Ile Gly Asn Ser Thr Val Ser Glu Ser Trp Gly Ser
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Thr Ile Thr Gln Arg Met Val Leu Ala Leu Ile Ala Phe Leu Val Ile
165 170 175

45 Ala Ala Ile Tyr Ile Ala Phe Arg Leu Glu Arg Glu Met Ala Ile Ala
180 185 190

Ala Met Ala Ala Leu Val Val Asp Gly Ile Val Ile Ala Gly Ile Tyr
195 200 205

50 Ala Val Ile Gly Leu Glu Val Ser Pro Ala Thr Val Ile Gly Leu Leu
210 215 220

55 Thr Val Leu Thr Phe Ser Ile Tyr Asp Thr Val Val Val Phe Asp Lys
225 230 235 240

Val Arg Glu Asn Thr Glu Gly Phe Glu Gly Ser Arg Arg Arg Thr Tyr
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Ala Glu Gln Ala Asn Leu Ala Val Asn Gln Thr Phe Met Arg Ser Ile
260 265 270

5 Ser Thr Thr Ile Ile Ser Ala Leu Pro Ile Ile Ala Leu Met Val Val
275 280 285

Ala Val Trp Met Met Gly Val Gly Thr Leu Lys Asp Leu Ala Leu Ile
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10 Gln Leu Ile Gly Val Ile Glu Gly Thr Phe Ser Ser Val Phe Leu Ala
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Thr Pro Leu Leu Val Ser Leu Lys Asn Arg Leu Ser Lys Thr Lys Ala
325 330 335

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340 345 350

20 Asp Ala Thr Pro His Thr Asn Ala Asp Ala Ser Ala His Gly Thr Glu
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Ser Asp Thr Asp Gly Val Thr Pro Glu Ala Pro Ala Lys Arg Thr Val
370 375 380

25 Ser Lys Pro Ile Val Asp Asp His Arg Ser Ser Gly Thr Trp Arg Pro
385 390 395 400

Gly Arg Ser

30